

**UPS 1998**

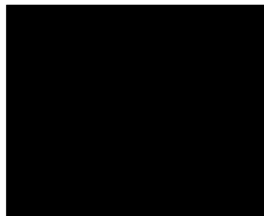
**USER INTERFACE  
GUIDELINES**

**Appendix C**

October 1996

***ON-LINE REVIEW***

**<http://isolde.gsfc.nasa.gov/ups>**



# **User Planning System (UPS), 1998 User Interface Guidelines**

## **APPENDIX C**

### **Prototype Panels**

The following illustrations are prototypes of the panels to be implemented for UPS '98. These panels show sample data, and include various subpanels, menus, and status windows.

**SELECT TABULAR SCHEDULING DATA**

SIC  
4625  
4626

Start 1998 132 00:00:00

Stop 1998 133 00:00:00

Duration 01 00:00:00

TDRS Set Name

SELECT ALL

ANY  
TDE  
041  
046  
TDW  
171  
174

TabularScheduling CLOSE

C-1. Select Tabular Scheduling Data panel

**SELECT SCHEDULE PLANNING DATA**

SIC  
4625  
4626

Start 1998 132 00:00:00

Stop 1998 133 00:00:00

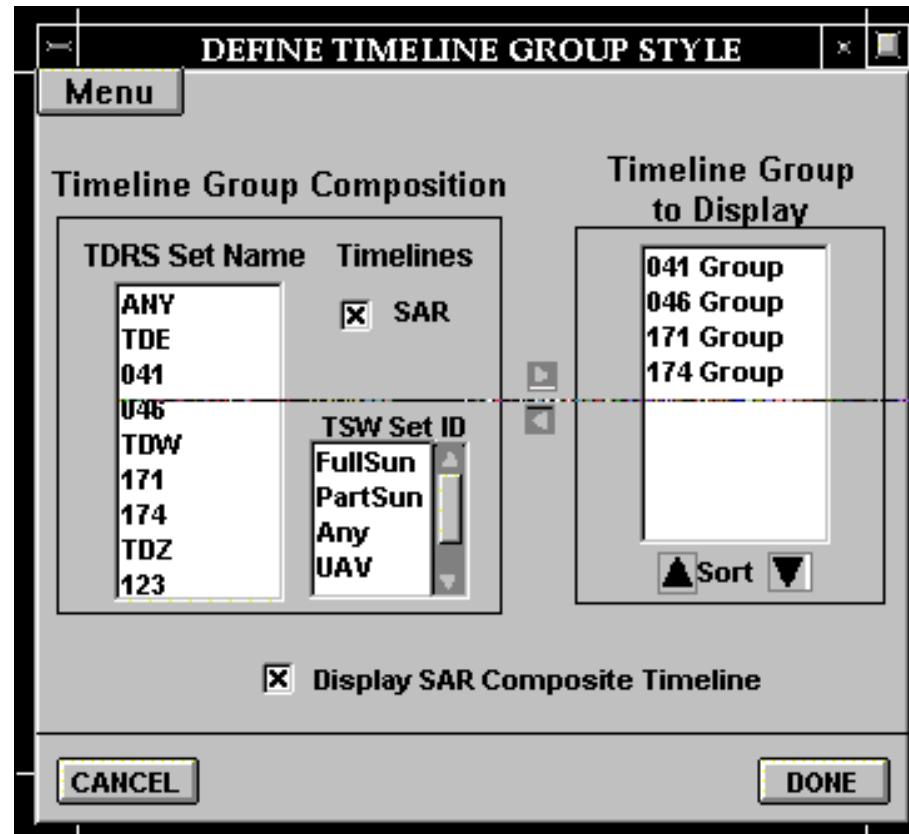
Duration 01 00:00:00

Choose Timeline Group Style:  
Forecast Scheduling  
Active Scheduling

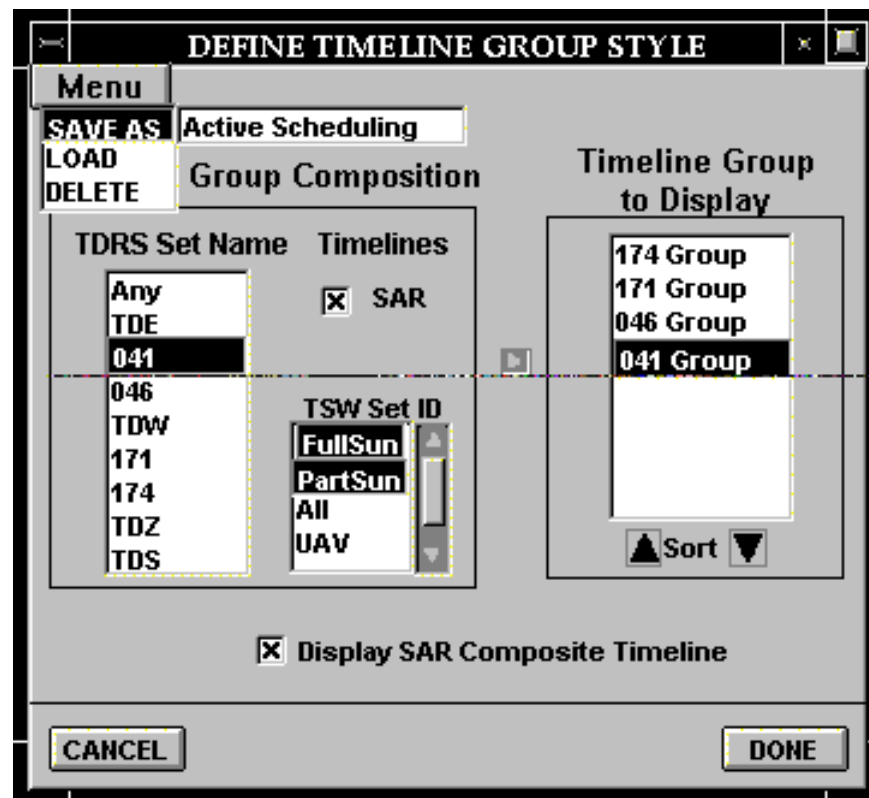
Define Timeline Group Style

Schedule Planning CLOSE

C-2. Select Schedule Planning Panel

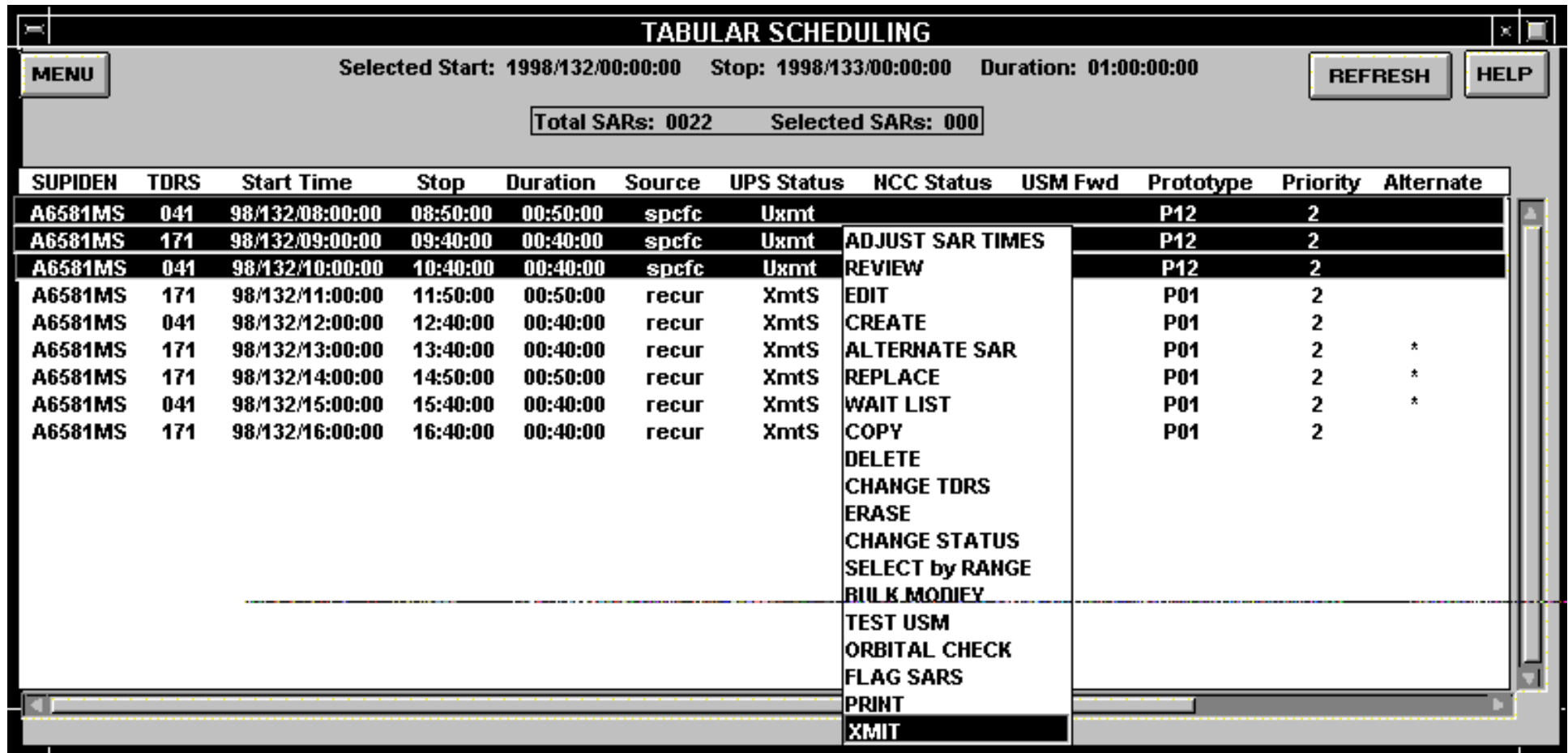


C-3. Define Timeline Group Style Panel



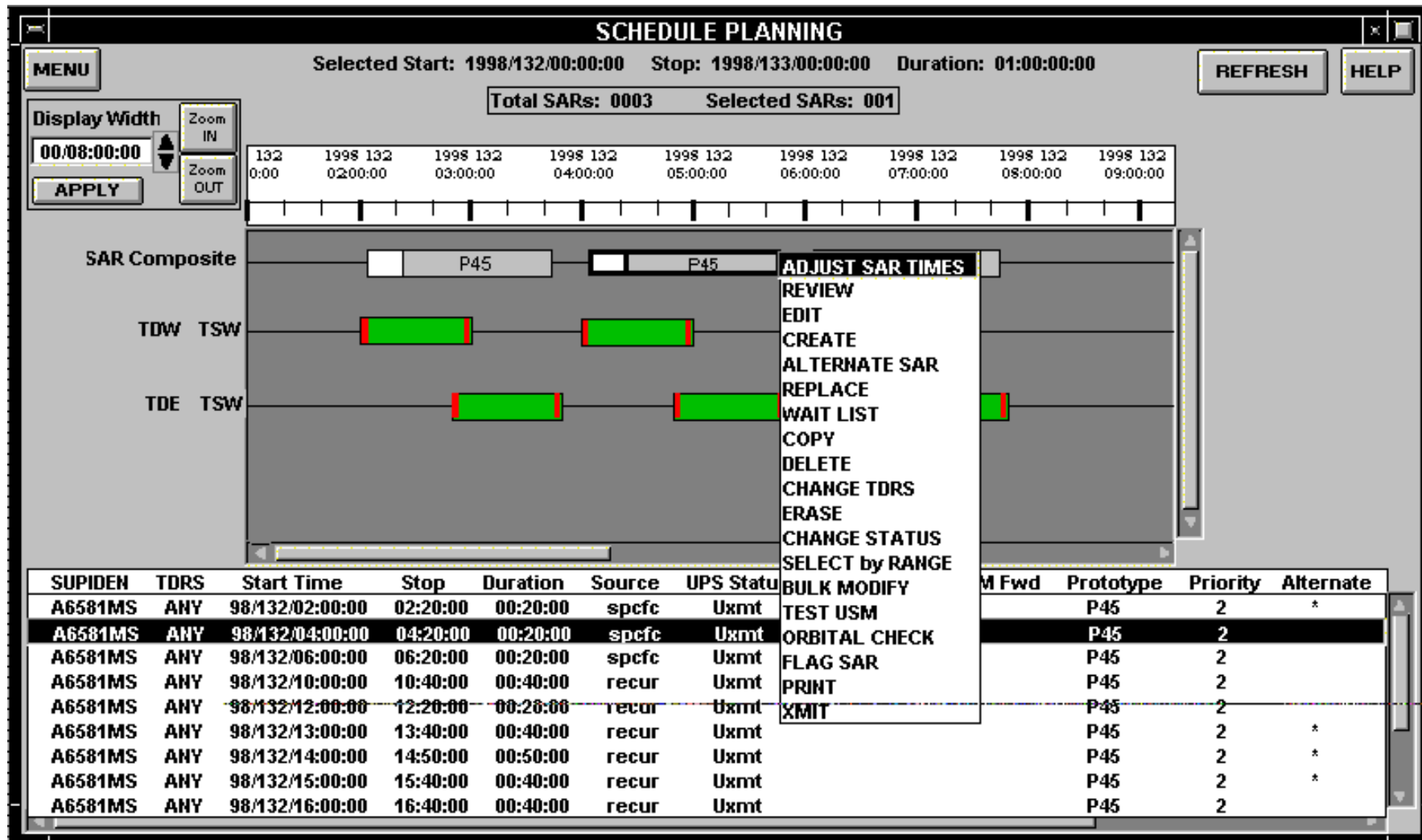
C-4. Define Timeline Group Style Panel (with SAVE AS menu selected)



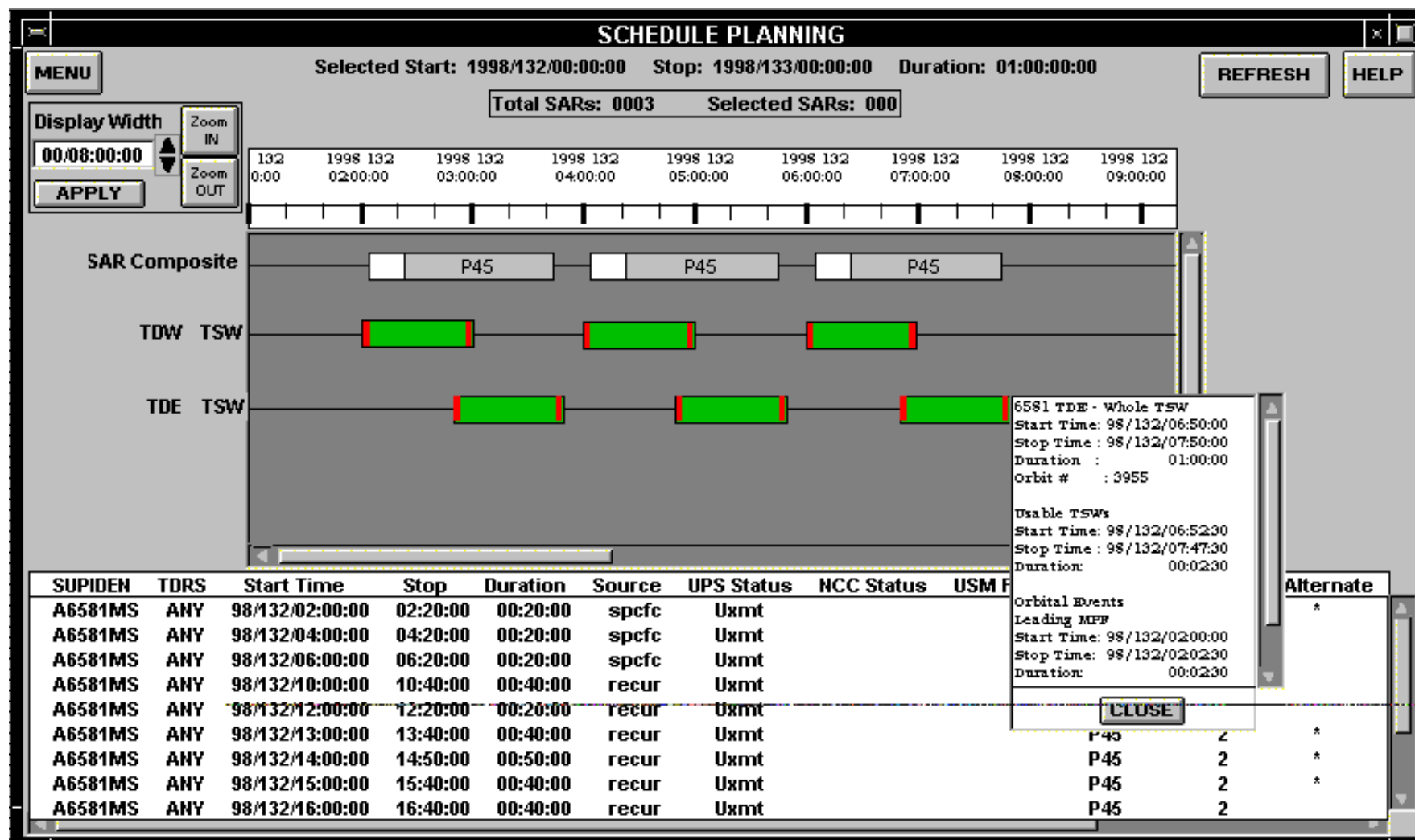


C-6. Tabular Scheduling Panel (with SAR Menu displayed)

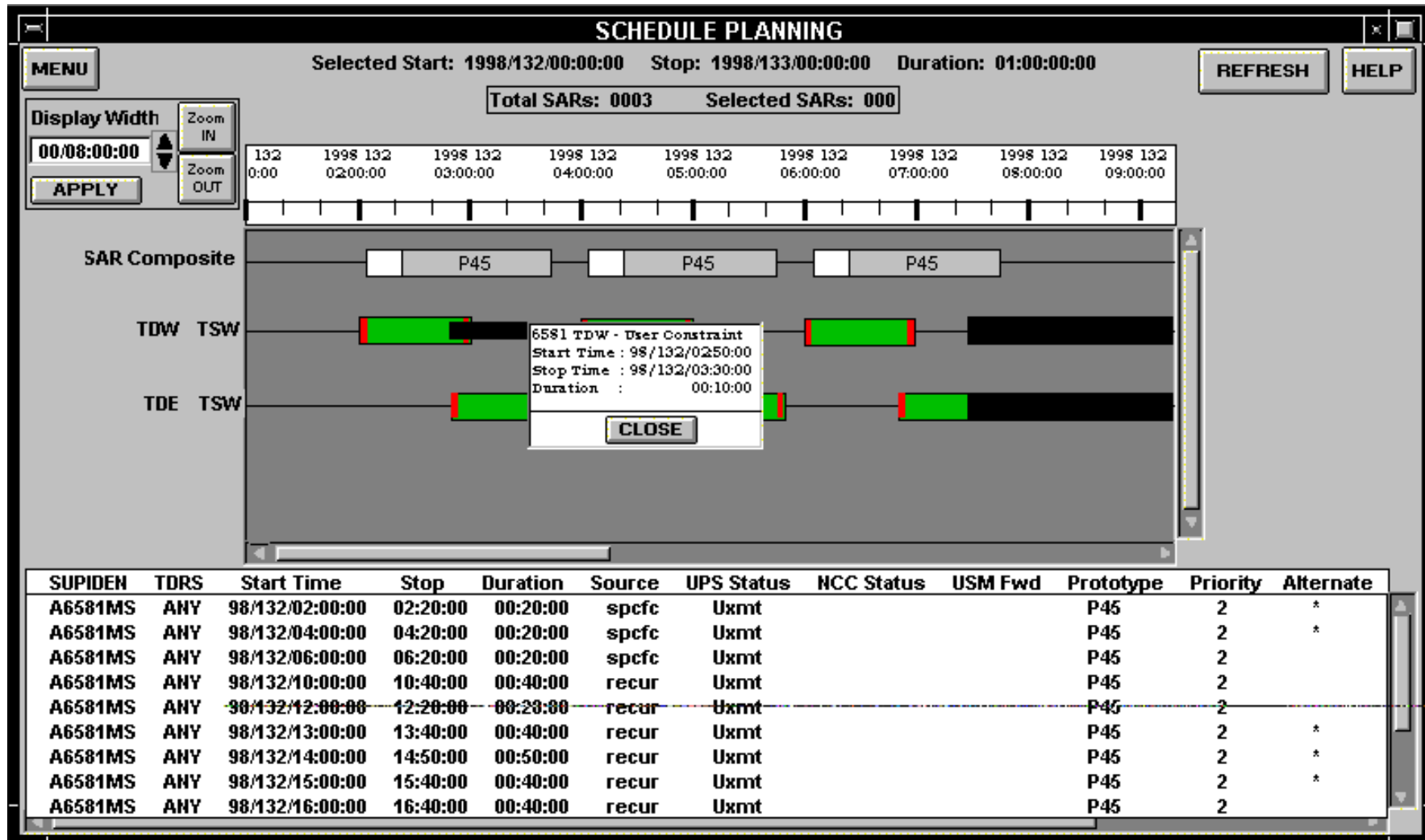




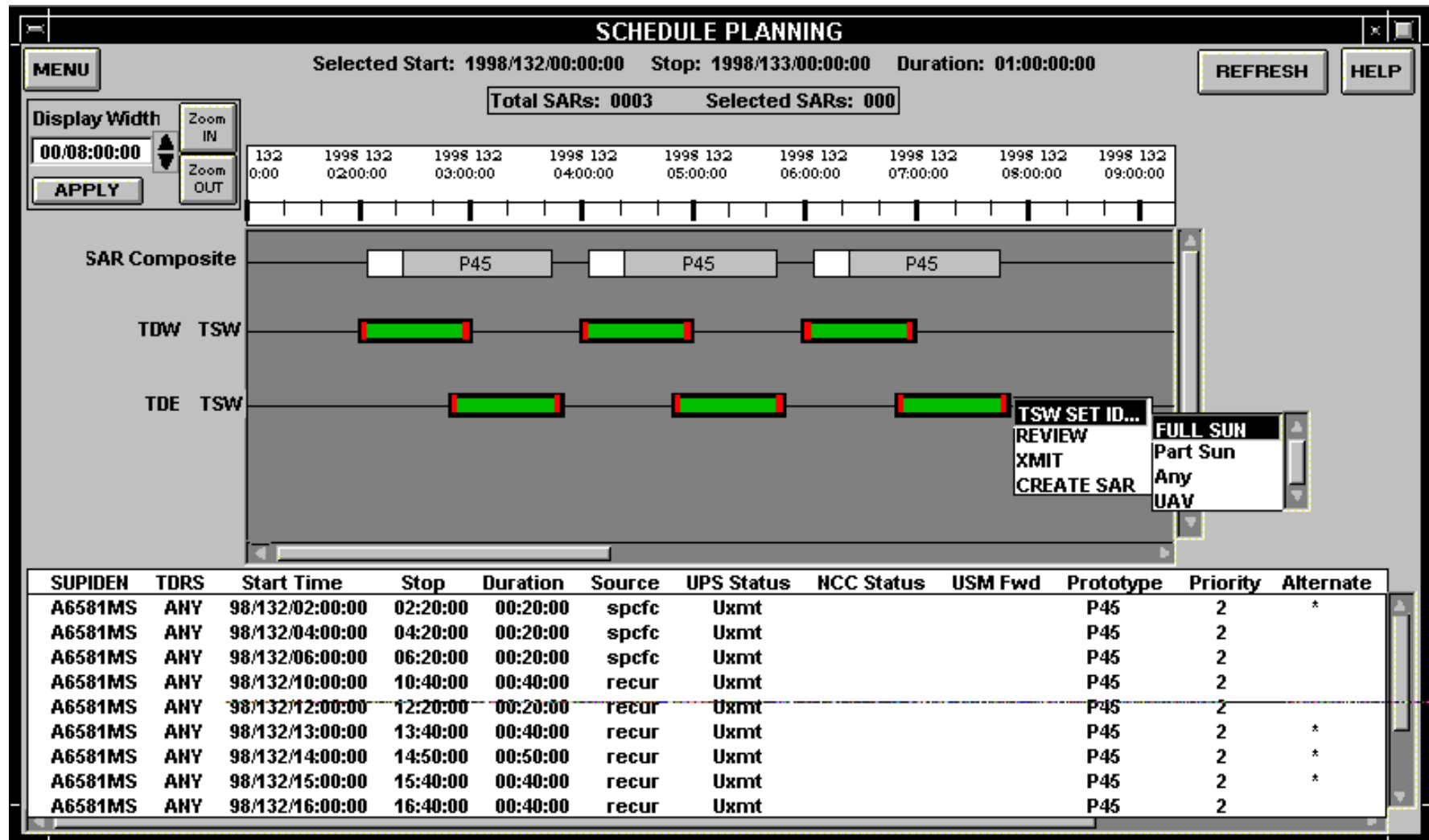
C-7. Schedule Planning Panel (with SAR Menu displayed)



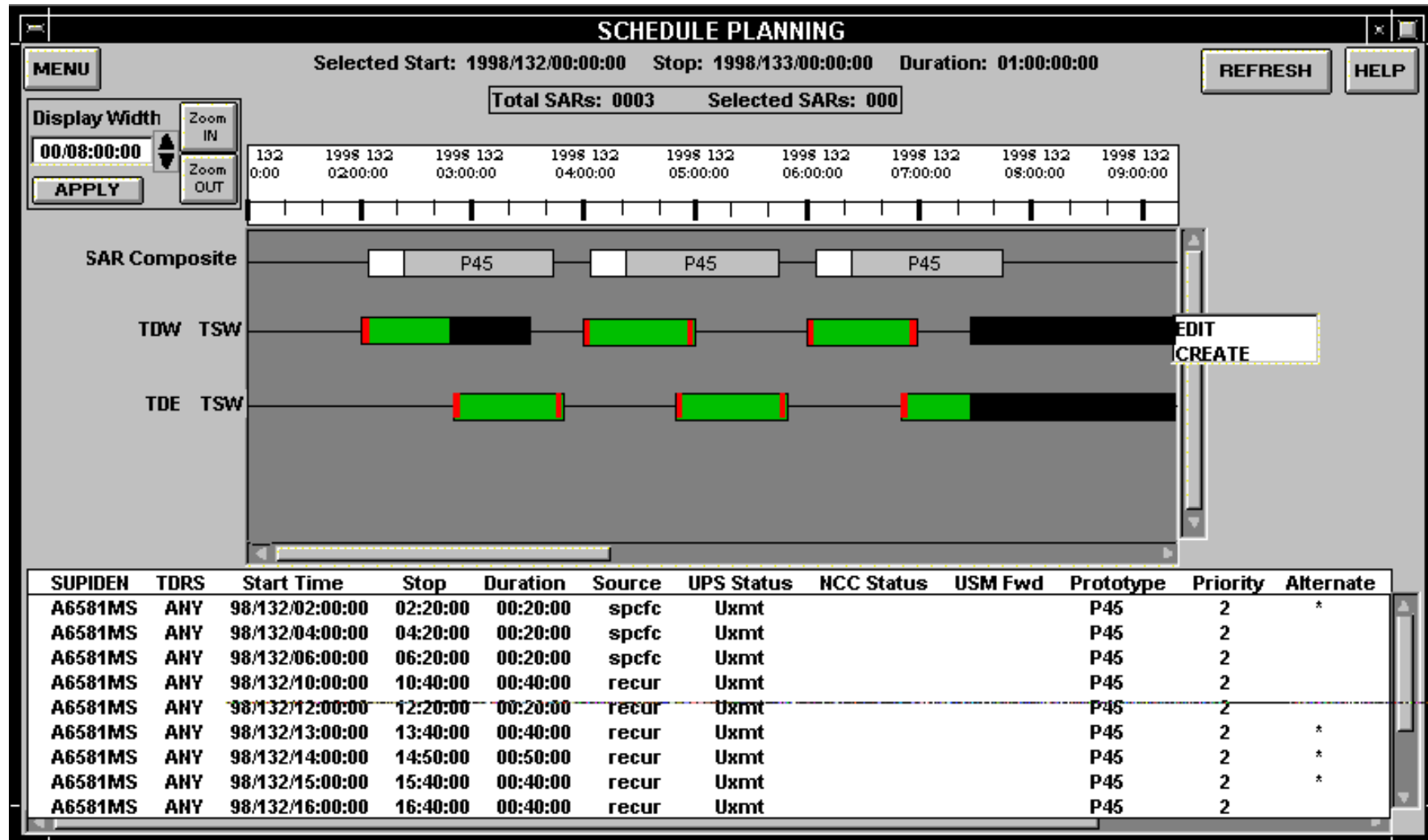
C-8 Schedule Planning Panel (with TSW Status Window displayed)



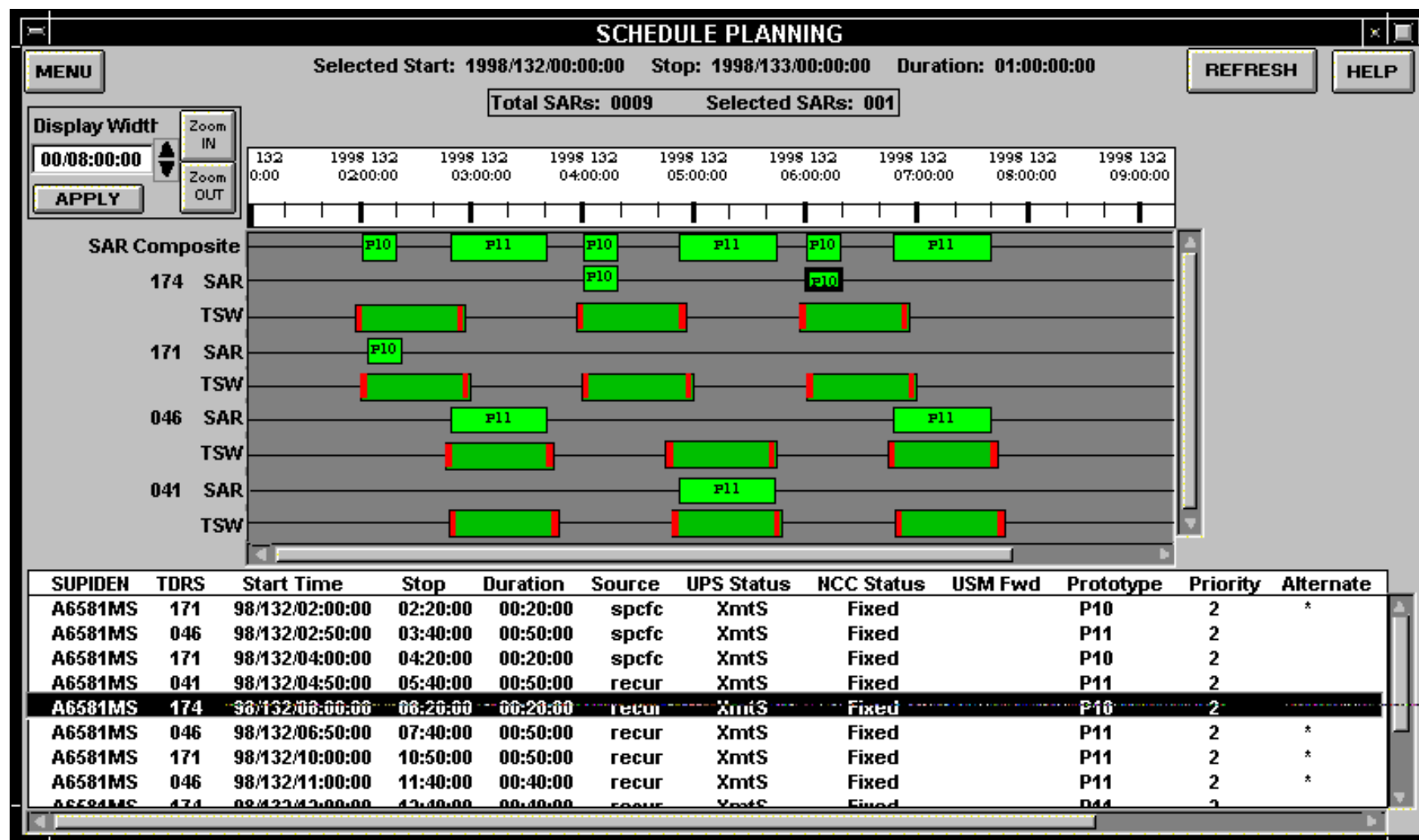
C-9. Schedule Planning Panel (with User Constraint Status Window displayed)



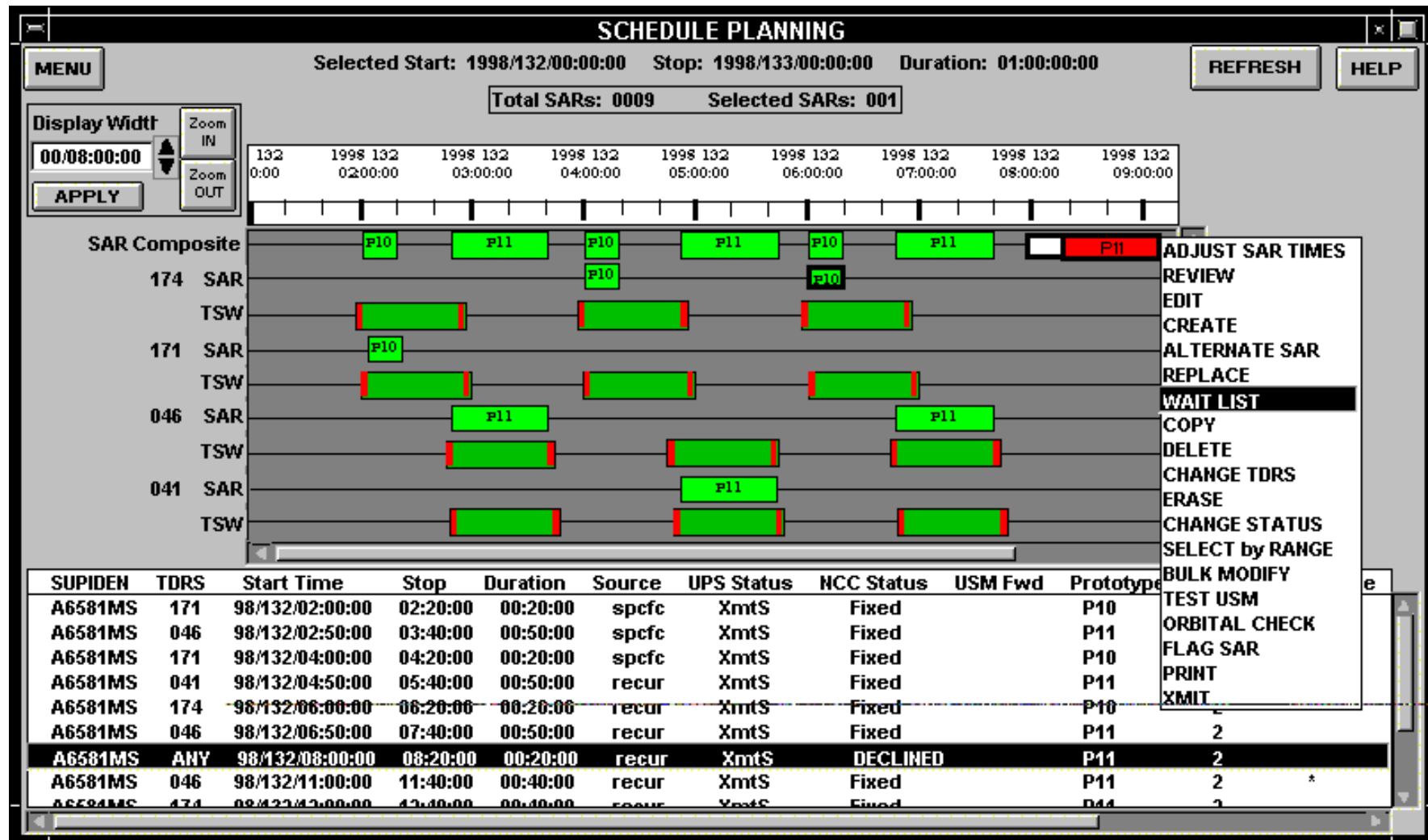
C-10. Schedule Planning Panel (with TSW Menu displayed, and TSW Set ID selected)



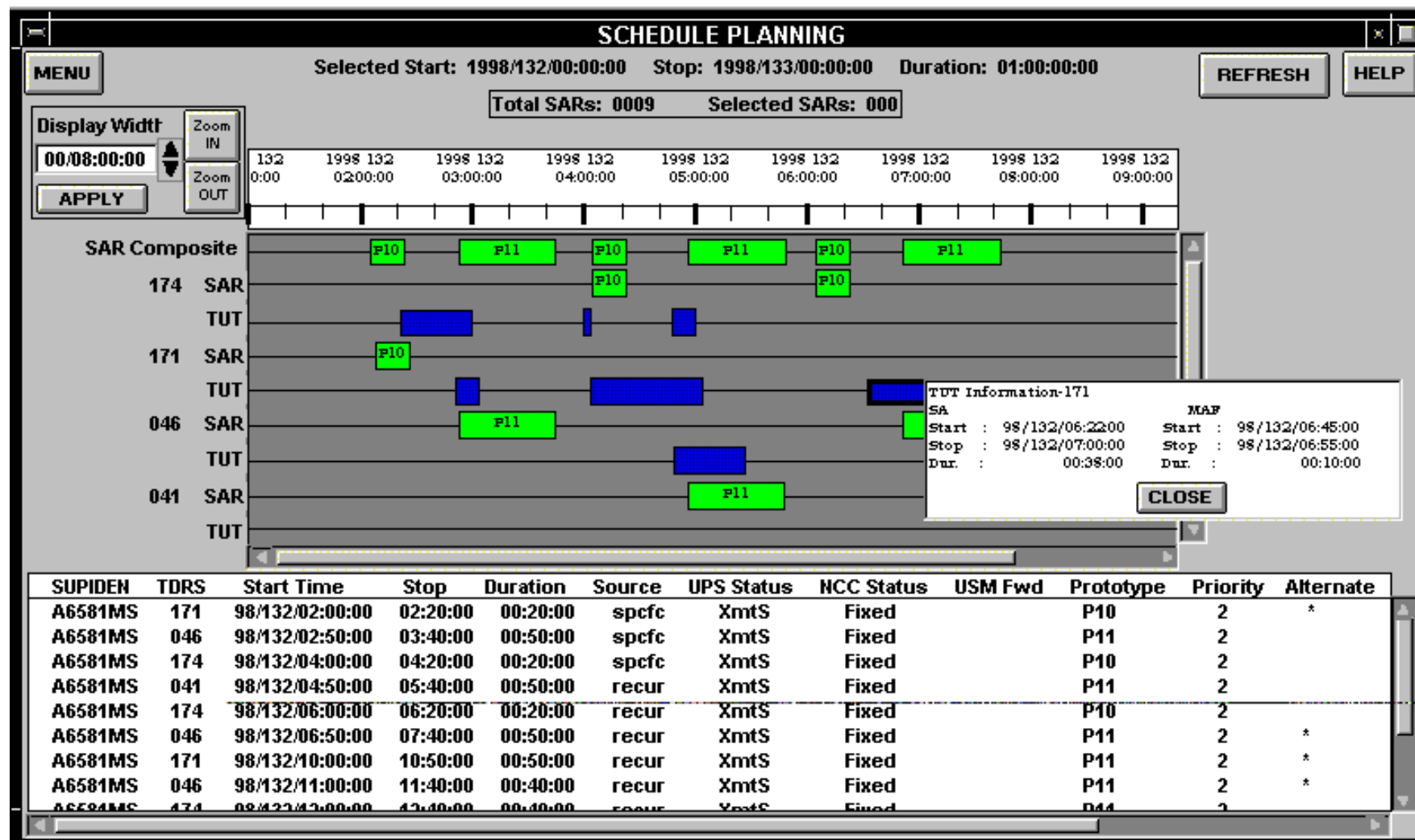
C-11. Schedule Planning Panel (with User Constraint Menu displayed)



C-12. Schedule Planning Panel (with events displayed)

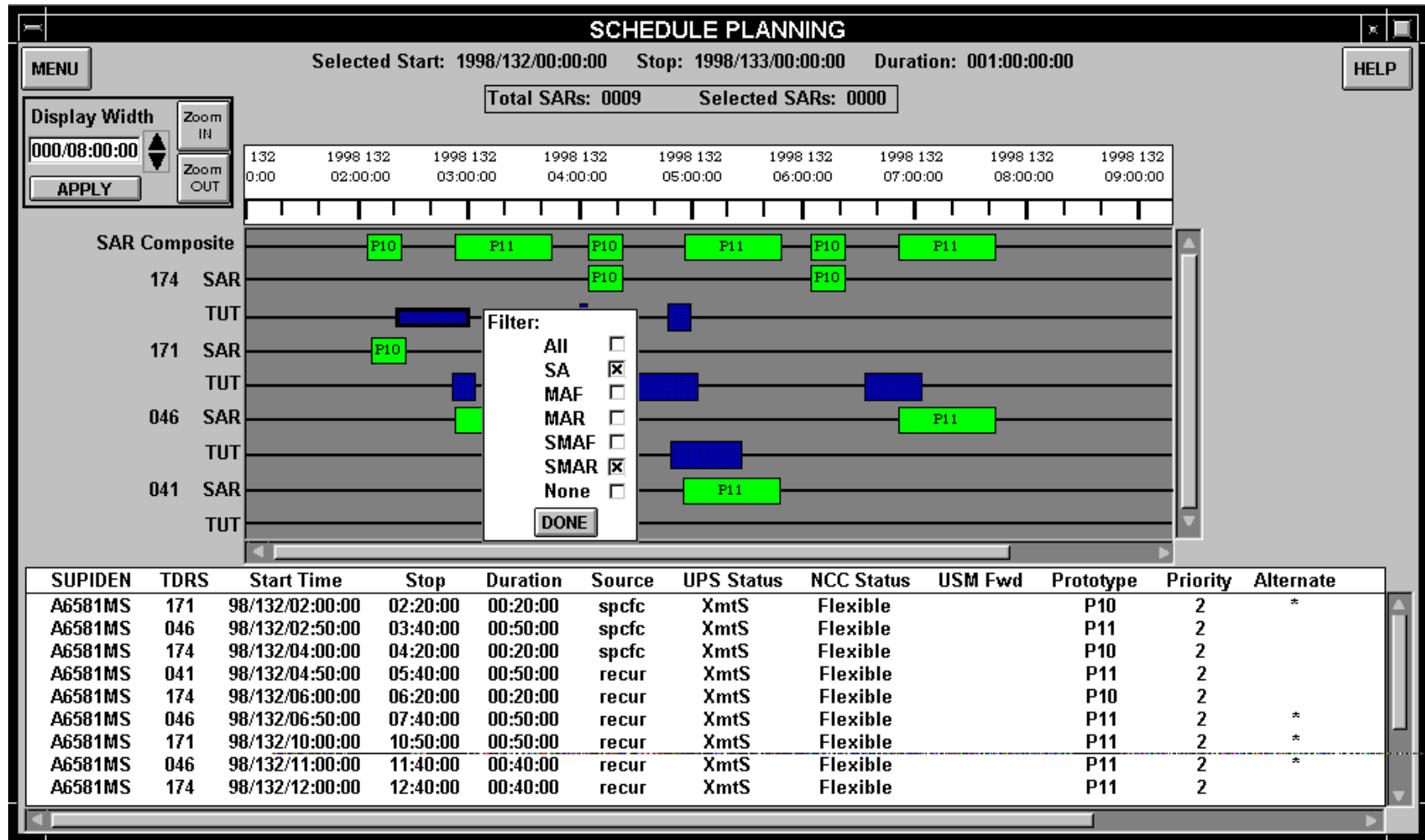


C-13. Schedule Planning Panel (with SAR Menu and Wait List selected)

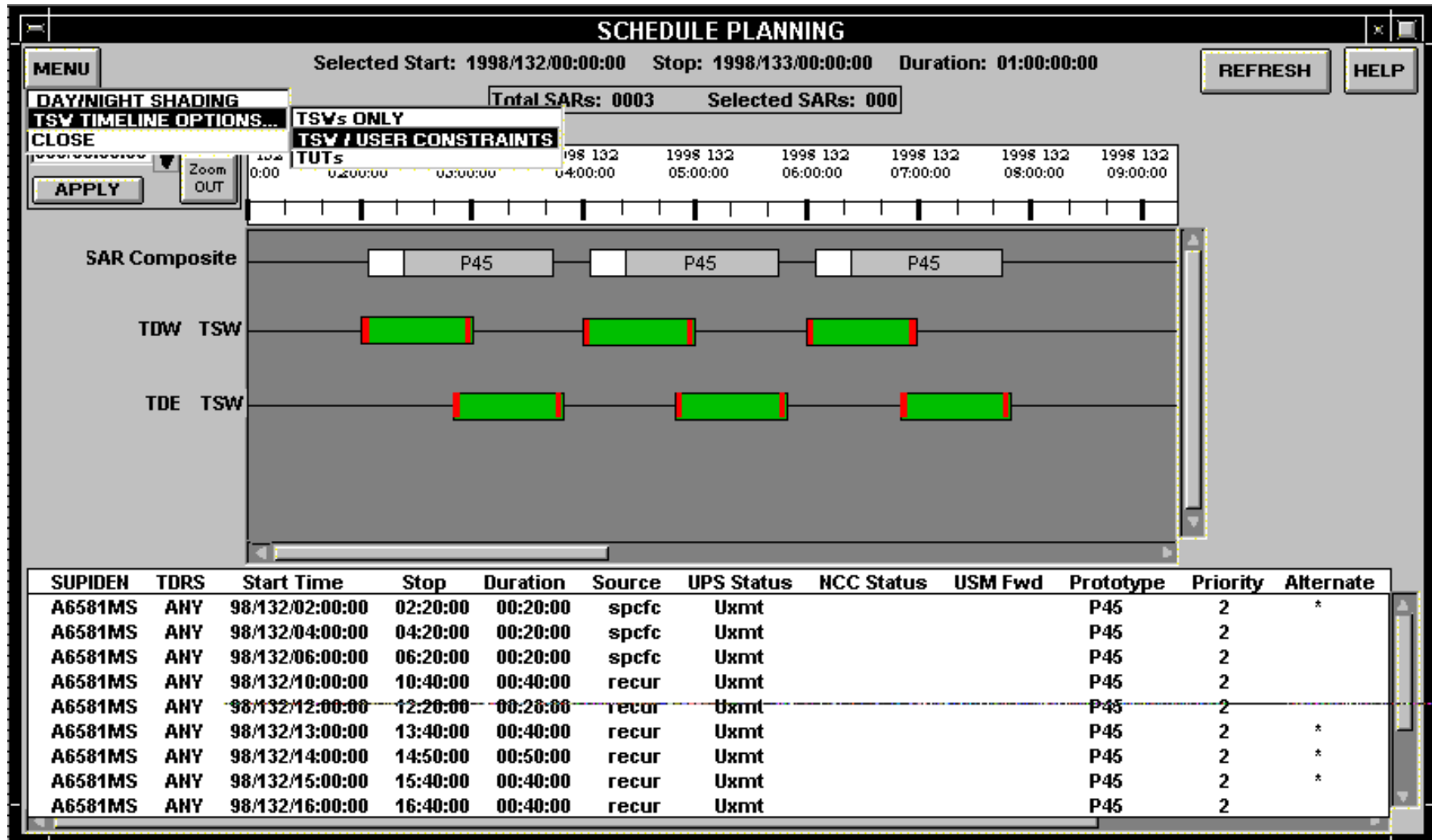


C-14. Schedule Planning Panel (with TUT Status Window displayed)

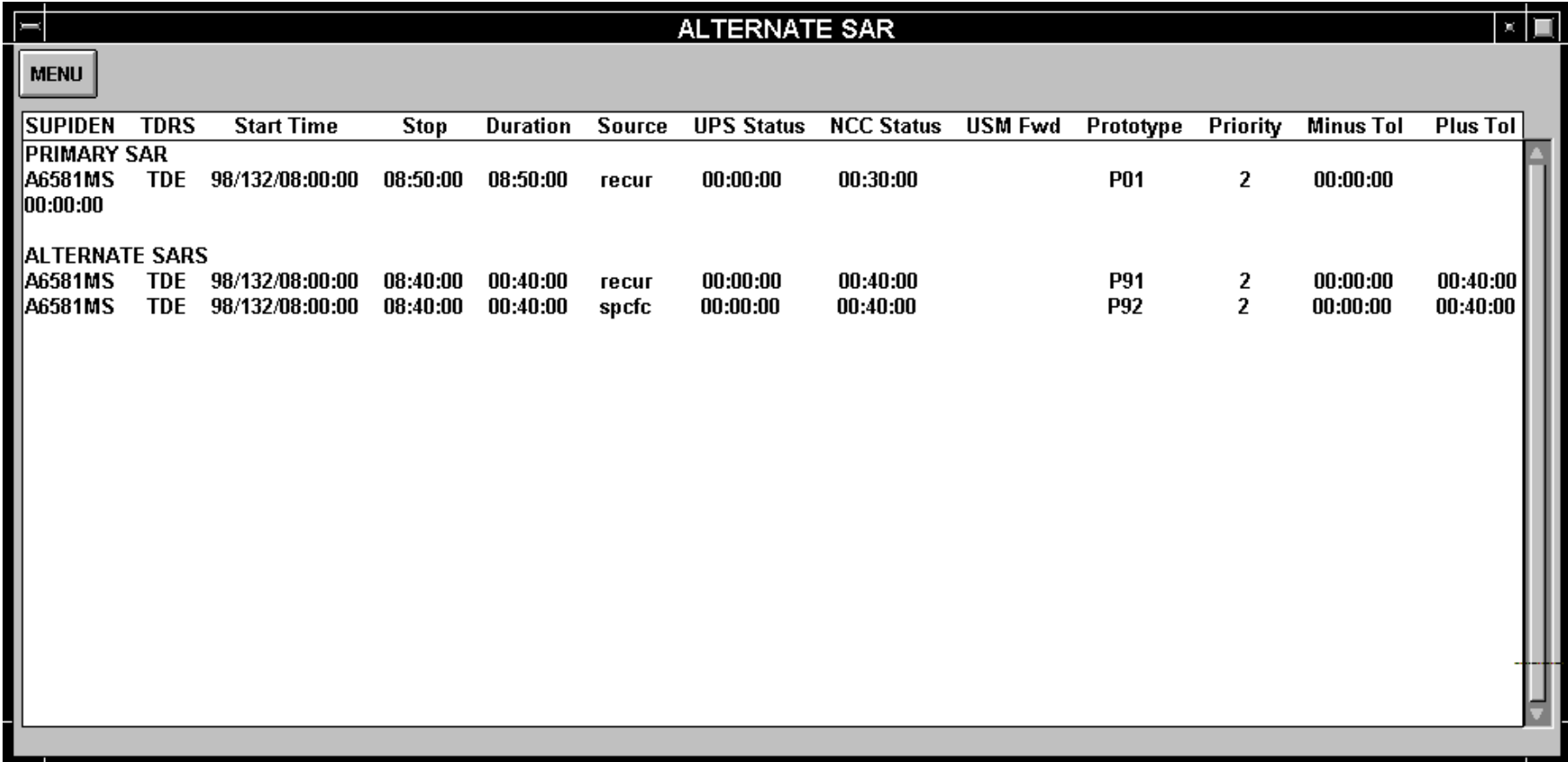




C-15. Schedule Planning Panel (with TUT Menu displayed)



C-16. Schedule Planning Panel (with Schedule Planning Menu displayed, and Timeline Options selected)



SUPIDEN	TDRS	Start Time	Stop	Duration	Source	UPS Status	NCC Status	USM Fwd	Prototype	Priority	Minus Tol	Plus Tol
PRIMARY SAR												
A6581MS 00:00:00	TDE	98/132/08:00:00	08:50:00	08:50:00	recur	00:00:00	00:30:00		P01	2	00:00:00	
ALTERNATE SARs												
A6581MS	TDE	98/132/08:00:00	08:40:00	00:40:00	recur	00:00:00	00:40:00		P91	2	00:00:00	00:40:00
A6581MS	TDE	98/132/08:00:00	08:40:00	00:40:00	spcfc	00:00:00	00:40:00		P92	2	00:00:00	00:40:00

C-17. Alternate SAR Panel

ALTERNATE SAR										
<b>MENU</b> MOVE UP MOVE DOWN ADJUST ALTERNATE SAR TIMES REVIEW EDIT CREATE REPLACE WAIT LIST COPY DELETE CHANGE TDRS ERASE CHANGE STATUS BULK MODIFY PRINT XMIT	Stop	Duration	Source	UPS Status	NCC Status	USM Fwd	Prototype	Priority	Minus Tol	Plus Tol
	08:50:00	08:50:00	recur	00:00:00	00:30:00		P01	2	00:00:00	
	08:40:00	00:40:00	recur	00:00:00	00:40:00		P91	2	00:00:00	00:40:00
	08:40:00	00:40:00	spcfc	00:00:00	00:40:00		P92	2	00:00:00	00:40:00

C-18. Alternate SAR Panel (with menu displayed)

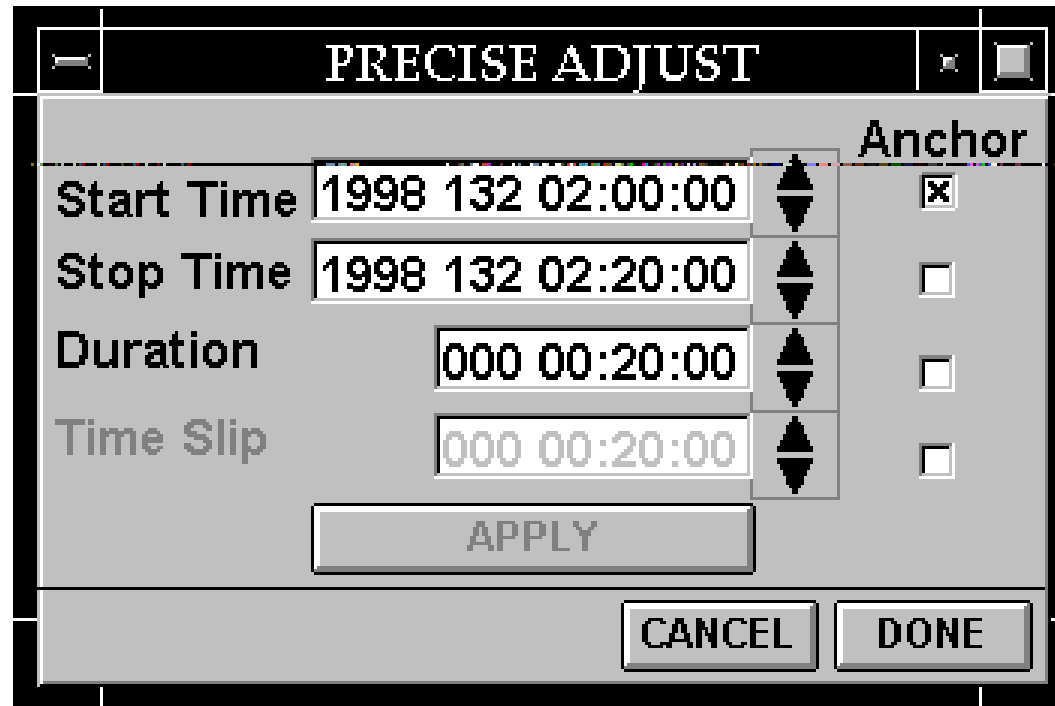
The image shows a software window titled "SAR INPUT". It contains several input fields and checkboxes. The "Start Time" field is set to "1998 132 02:00:00" and has a checked "Anchor" checkbox. The "Stop Time" field is set to "1998 132 02:20:00" and has an unchecked "Anchor" checkbox. The "Duration" field is set to "00:20:00" and has an unchecked "Anchor" checkbox. The "Plus Tolerance" field is set to "00:04:00" and has an unchecked "Anchor" checkbox. The "Minus Tolerance" field is set to "00:01:00" and has an unchecked "Anchor" checkbox. There is an "APPLY" button at the bottom center, and "CANCEL" and "DONE" buttons at the bottom right.

Field	Value	Anchor
Start Time	1998 132 02:00:00	<input checked="" type="checkbox"/>
Stop Time	1998 132 02:20:00	<input type="checkbox"/>
Duration	00:20:00	<input type="checkbox"/>
Plus Tolerance	00:04:00	<input type="checkbox"/>
Minus Tolerance	00:01:00	<input type="checkbox"/>

APPLY

CANCEL DONE

C-19. SAR Input Panel



A screenshot of a graphical user interface dialog box titled "PRECISE ADJUST". The dialog has a standard Mac OS-style title bar with a close button on the right. The main content area is divided into two columns. The left column contains four labels: "Start Time", "Stop Time", "Duration", and "Time Slip". Each label is followed by a text input field. The "Start Time" field contains "1998 132 02:00:00", "Stop Time" contains "1998 132 02:20:00", "Duration" contains "000 00:20:00", and "Time Slip" contains "000 00:20:00". To the right of each input field is a vertical double-headed arrow icon. The right column is headed "Anchor" and contains four checkboxes. The first checkbox is checked, while the others are unchecked. Below the input fields is an "APPLY" button. At the bottom right of the dialog are "CANCEL" and "DONE" buttons.

		Anchor
Start Time	1998 132 02:00:00	<input checked="" type="checkbox"/>
Stop Time	1998 132 02:20:00	<input type="checkbox"/>
Duration	000 00:20:00	<input type="checkbox"/>
Time Slip	000 00:20:00	<input type="checkbox"/>

APPLY

CANCEL DONE

C-20. Precise Adjust Panel (with Duration enabled)

The screenshot shows a dialog box titled "PRECISE ADJUST". It contains four rows of time-related settings, each with a text input field, a vertical spinner, and a checkbox in the "Anchor" column. The settings are: Start Time (1998 132 02:00:00), Stop Time (1998 132 02:20:00), Duration (000 00:20:00), and Time Slip (000 00:20:00). Below these is an "APPLY" button, and at the bottom are "CANCEL" and "DONE" buttons.

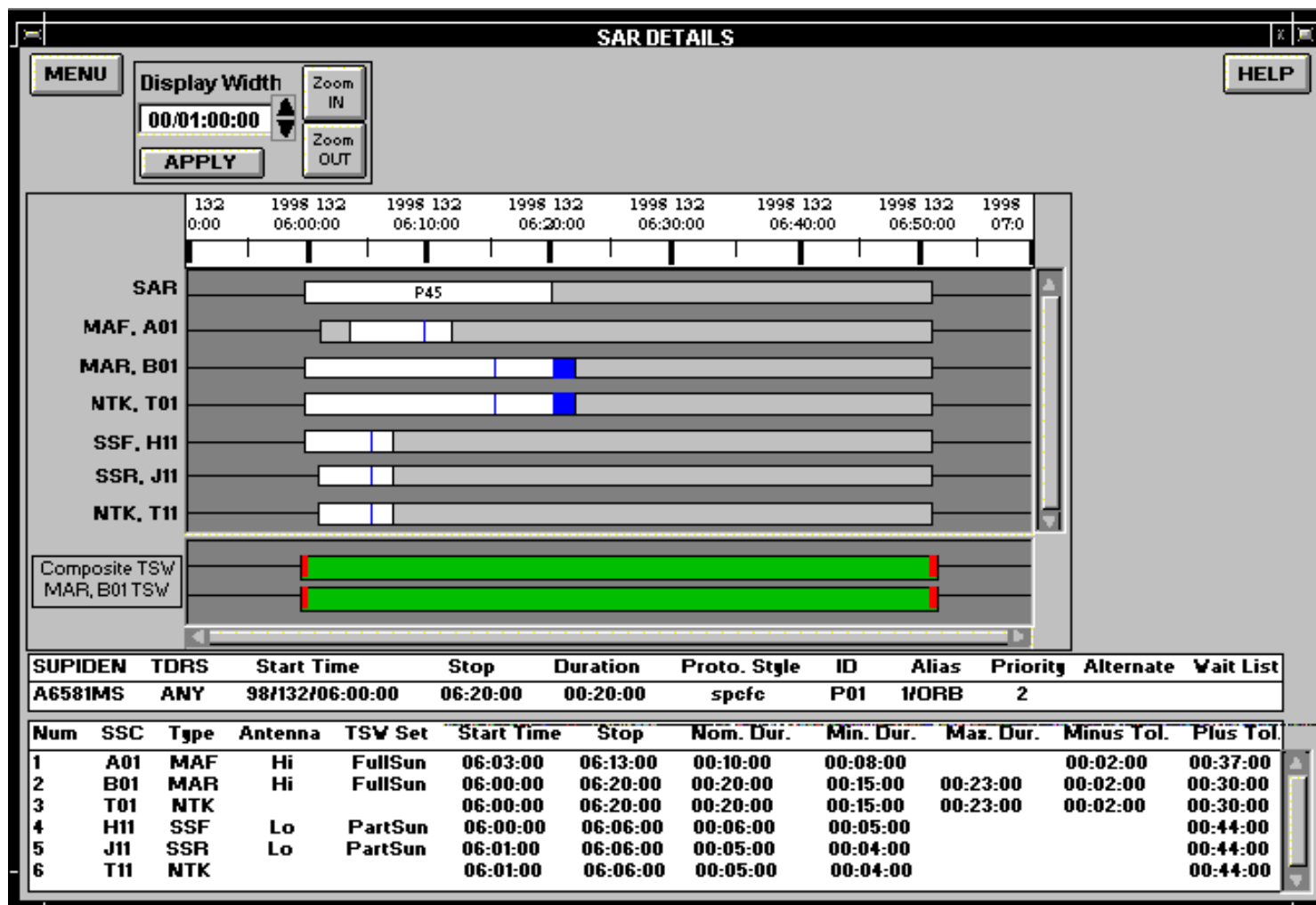
			Anchor
Start Time	1998 132 02:00:00	↑↓	<input type="checkbox"/>
Stop Time	1998 132 02:20:00	↑↓	<input type="checkbox"/>
Duration	000 00:20:00	↑↓	<input type="checkbox"/>
Time Slip	000 00:20:00	↑↓	<input type="checkbox"/>

APPLY

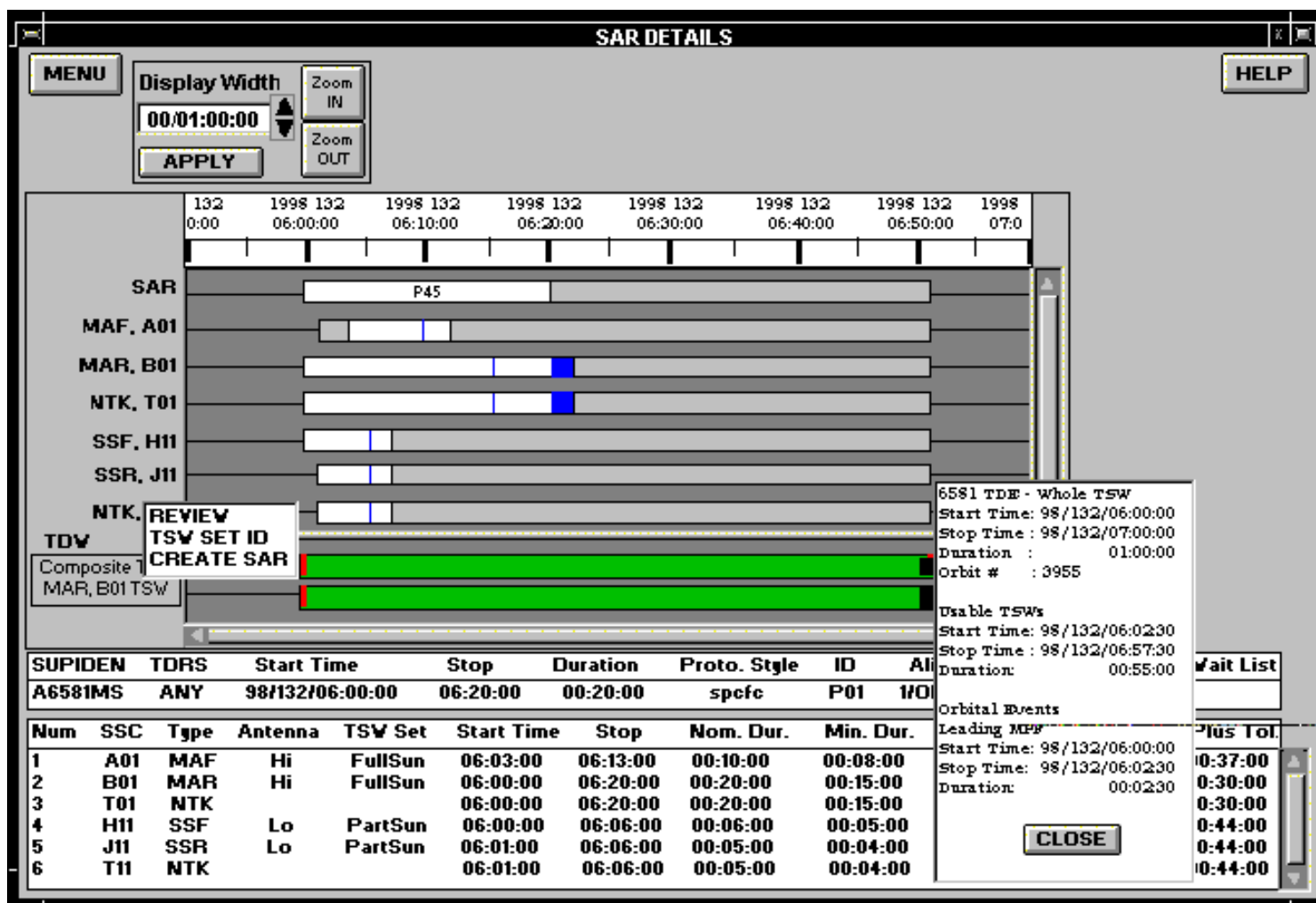
CANCEL DONE

### C-21. Precise Adjust Panel (with Time Slip enabled)

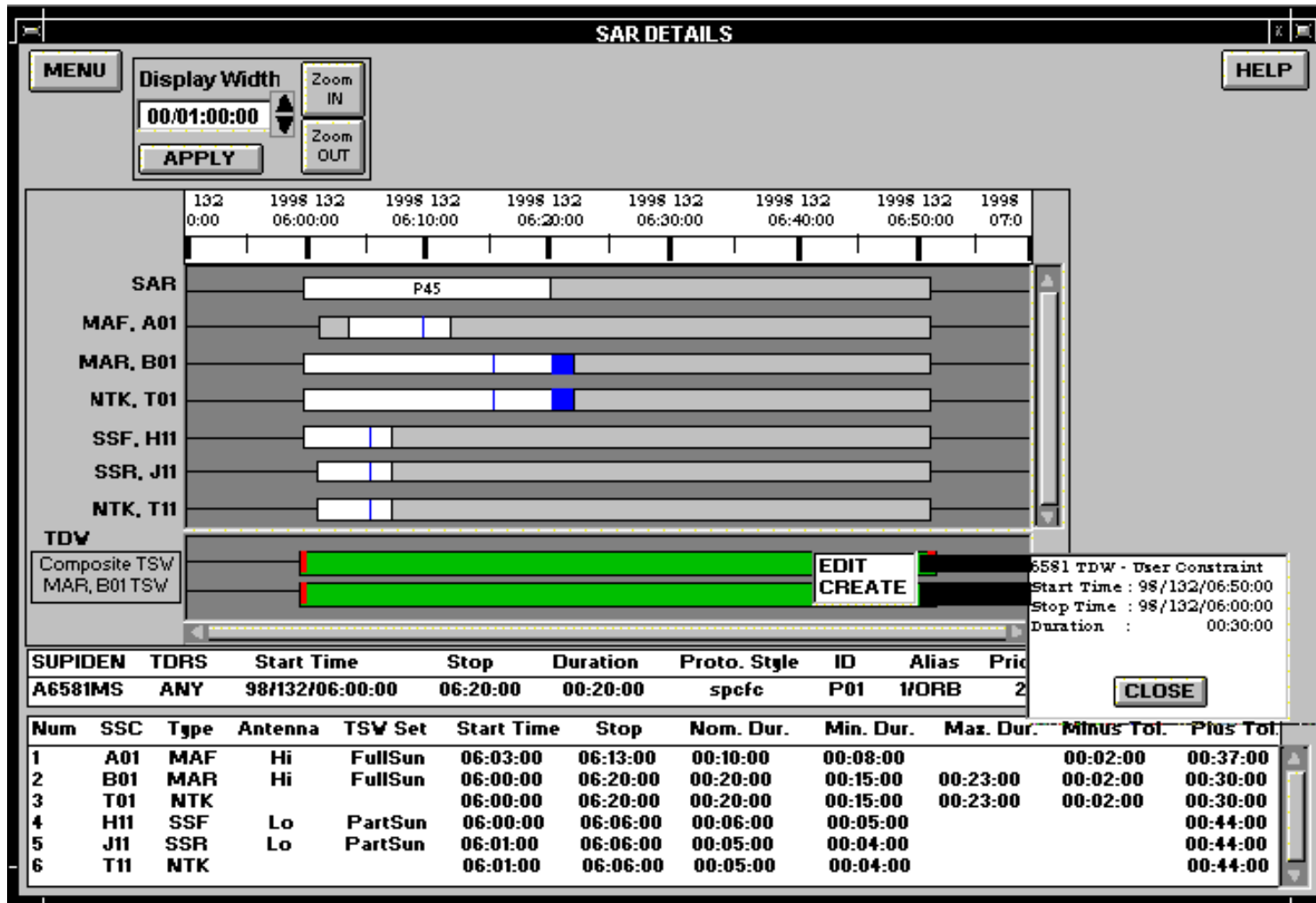




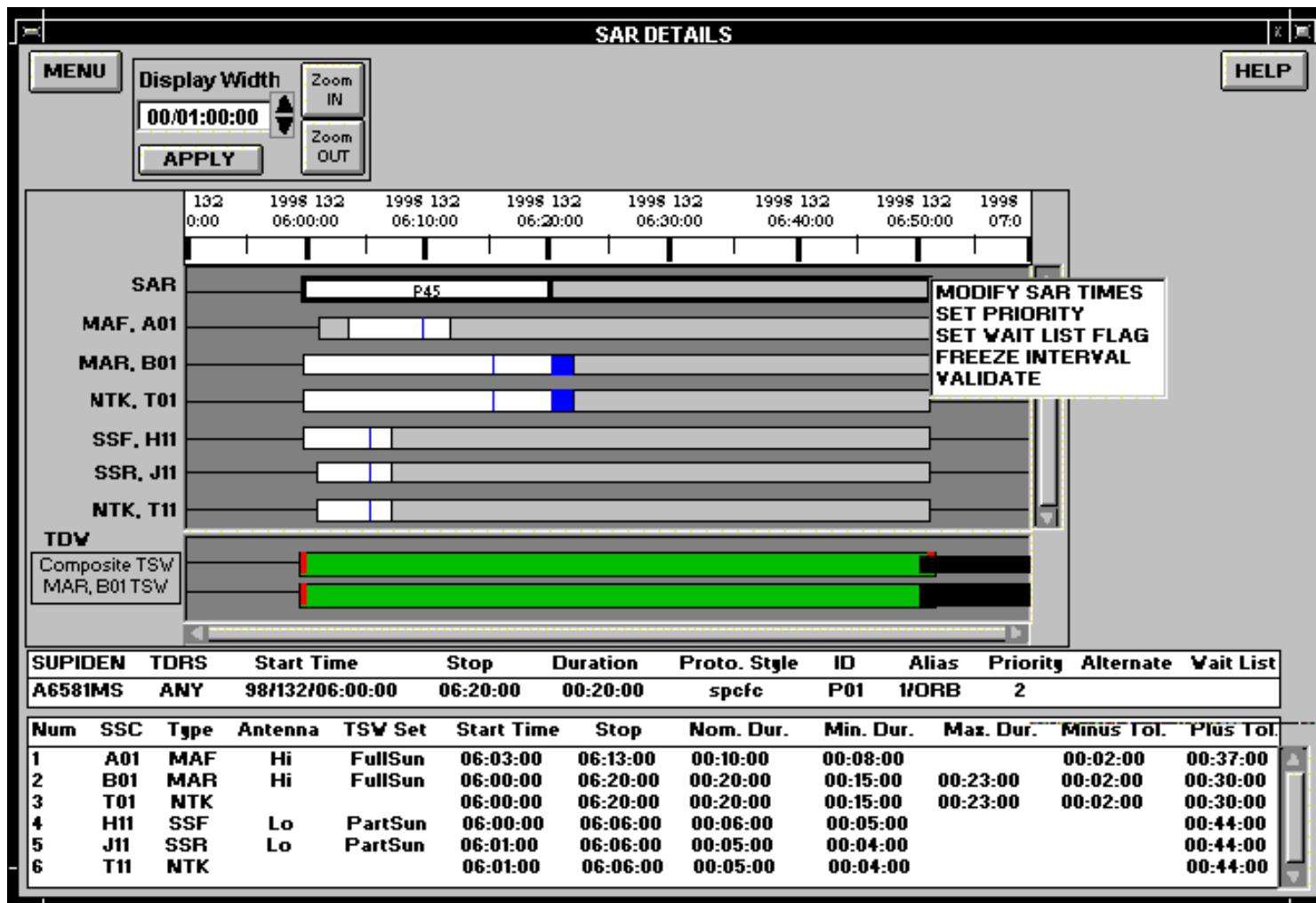
C-22. SAR Details Panel



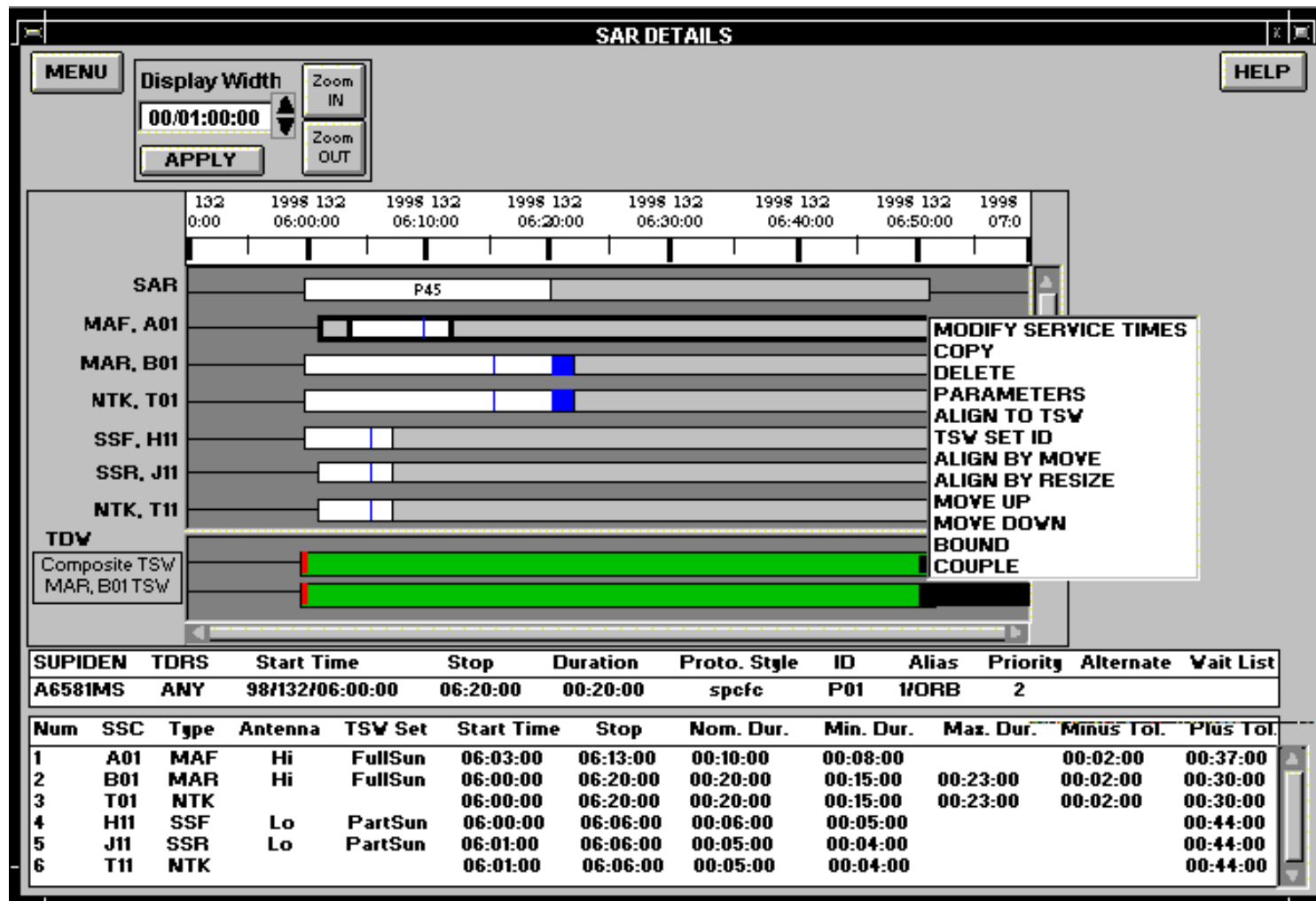
C-23. SAR Details Panel (with TSW Status Window and TSW Menu displayed)



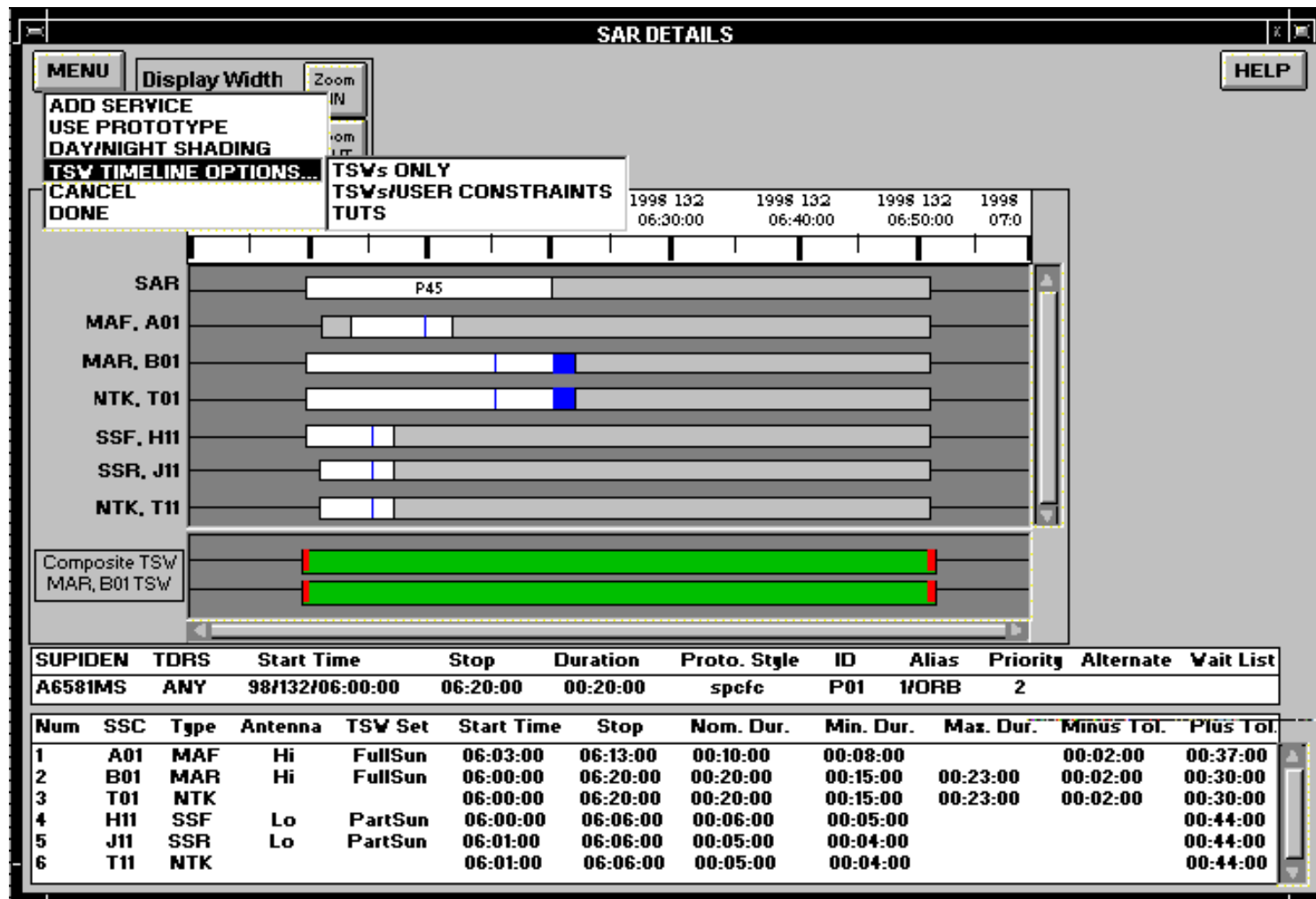
C-24. SAR Details Panel (with User Constraint Status Window and Menu displayed)



C-25. SAR Details Panel (with SAR Menu displayed)



C-26. SAR Details Panel (with Service Menu displayed)



C-27. SAR Details Panel (with SAR Details Menu displayed)

**MODIFY SAR TIMES**

Start Time 1998 132 02:00:00

Stop Time 1998 132 02:20:00

Duration 00:20:00

Time Slip

Plus Tolerance 00:04:00

Minus Tolerance 00:01:00

Anchor

☒ ☐ ☐

APPLY

CANCEL DONE

C-28. Modify SAR Times Panel



**MODIFY SERVICE TIMES**

**Anchor**

Start Time	02:00:00	<input checked="" type="checkbox"/>	Min. Duration	00:20:00
Stop Time	02:20:00	<input type="checkbox"/>	Max. Duration	00:20:00
Nominal Duration	00:20:00	<input type="checkbox"/>	Plus Tolerance	00:00:00
Time Slip			Minus Tolerance	00:00:00
Plus Tolerance	00:04:00			
Minus Tolerance	00:01:00			

APPLY

CANCEL DONE

C-29. Modify Service Times Panel

**ORBITAL PARAMETERS**

Spacecraft ID Code (SIC) 3782

**HELP**

Max. Days for GMT:  Long Day Flag: ☐ No ☐ Yes Continuity Check: ☐ No ☐ Yes

Smoothing Range:  Orbital Data Format: ☐ MODNET header ☐ No MODNET header Create TSWs from: ☐ UAV/PSATs ☐ PSATs only Validation Bypass: ☐ No ☐ Yes

TSW Service Type

MA Hi  
MA Lo  
SSA Hi  
SSA Lo  
KSA Hi  
KSA Lo  
SMA Hi  
SMA Lo  
KaSA Hi  
KaSA Lo

Orbit Point Name	Alias (A-Z)	Area Type: <input type="checkbox"/> Exclusion <input type="checkbox"/> Inclusion	Min Time (Ext/Ent) (HHMMSS)	Min Time (Ext/Ent) (HHMMSS)	Min Time (Ext/Ent) (HHMMSS)
South Atlantic Anomaly	A	Exclusion	004000	004000	010000
Zone of Exclusion	Z	Exclusion	004000	004000	010000
Sunlight	S	Inclusion	000000	000000	000000
Multi-Path Fringe	M	Exclusion	000000	000000	000000

**ADD**

**REMOVE**

**MODIFY**

**DONE** **CANCEL**

C-30. Orbital Parameters Panel

**ORBITAL CONSTRAINTS**

Spacecraft ID Code (SIC) 3782 HELP

**ORBITAL EVENTS USED WHEN GENERATING TSWs:**

**Display-Only**

South Atlantic Anomaly

**All Orbital Events**

Rain Forest  
Radio Frequency Interference

**Schedule-To Display?**

Sunlight N  
Multi-Path Fringe Y

**Display in TSW?**

☐ Yes  
☐ No

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**TDRS TO SPACECRAFT**

MA Forward:	SSA Forward:	KSA Forward:
<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None
<input type="checkbox"/> 1 Degree	<input type="checkbox"/> 1 Degree	<input type="checkbox"/> 1 Degree
<input type="checkbox"/> 3 Degree	<input type="checkbox"/> 3 Degree	<input type="checkbox"/> 3 Degree
<input type="checkbox"/> 4 Degree	<input type="checkbox"/> 4 Degree	<input type="checkbox"/> 4 Degree

**GROUND TERMINAL TO TDRS**

☐ None  
☐ 1 Degree  
☐ 5 Degree

**SPACECRAFT TO TDRS**

MA Return:	SSA Return:	KSA Return:
<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None
<input type="checkbox"/> 1 Degree	<input type="checkbox"/> 1 Degree	<input type="checkbox"/> 1 Degree
<input type="checkbox"/> 3 Degree	<input type="checkbox"/> 3 Degree	<input type="checkbox"/> 3 Degree
<input type="checkbox"/> 4 Degree	<input type="checkbox"/> 4 Degree	<input type="checkbox"/> 4 Degree

**MULTIPATH FRINGE**

☐ Off  
☐ On

**TDRS SUN INTRUSION**

☐ None  
☐ 1 Degree  
☐ 5 Degree

DONE CANCEL

C-31. Orbital Constraints Panel

**DEFINE TSW SETS**

TSW Service Type: MA Hi, MA Lo, SSA Hi, SSA Lo

Schedule-To Orbital Events: Sunlight, Rain-Forest, Multi-Path Fringe

Orbital Event Endpoint Adjustments: Entry ☐ -00:05:00, Exit ☐ +00:05:00

**ADD**

Orbital Event Filter	Entry	Exit	Service
A Sunlight	+00:00:00	+00:00:00	SH, SL
B Sunlight	-00:05:00	+00:05:00	SH, SL
C Multi-Path Fringe	-00:00:00	+00:00:00	MH, ML, SH, SL

**REMOVE**

Logical Expression: NOT C AND B

TSW Set: PartSun

**ADD**

TSW Set	Condition
PartSun	Not Multi-Path Fringe and Sunlight, -00:05:00, +00:05:00, SH, SL
FullSun	Not Multi-Path Fringe and Sunlight, SH, SL
Any	Not Multi-Path Fringe, MH, ML, SH, SL
UAV	MH, ML, SH, SL

**REMOVE**

**UAV TSW SET**

**CLOSE**

C-32. Define TSW Sets Panel

**TRANSMIT TSW MESSAGES**

**Time Period**

Start 1998/138/00:00:00

Stop 1998/140/00:00:00

Dur. 1998/002/00:00:00

**TSW Set**

- MFH
- MRII
- SFLFULLSUN
- SRLFULLSUN
- SFLPARTSUN
- SRLPARTSUN
- SFL
- SRL

XMIT CLOSE

C-33. Transmit TSW Messages Panel